## ABERCROMBIE & FITCH COMPANY ET AL. v. BALDWIN ET AL.

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE SECOND CIRCUIT.

No. 67. Argued November 19, 20, 1917.—Decided December 10, 1917.

The Baldwin patent, original No. 821,580, reissue No. 13,542, for improvements in acetylene gas generating lamps, held valid and infringed as to claim 4.

The patent relates to an acetylene gas generating lamp, with an upper reservoir for water and a lower receptacle for calcium carbide, connected by a tube, with a rod extending through the tube and subject to manipulation from above. The inventive features involved lie in securing a proper flow of the water through the tube and access for it to the unslaked carbide, the first, by adopting a comparatively large tube with a size of rod suitably restricting its capacity; the second, by manipulating the rod when necessary to break up slaked carbide at the mouth of the tube in the lower receptacle.

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Held, upon the evidence, that the invention is meritorious and entitled to invoke the doctrine of equivalents. Paper Bag Patent Case, 210
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The original patent having figured the tube as extending to and embedded in the carbide, and described the rod as a means, when manipulated, of breaking up slaked carbide at the lower mouth of the tube, to permit the water to percolate to the unslaked carbide, held, that an amendment in the reissue explicitly describing the tube as so extended and embedded did not enlarge the patent.

In the original patent specification, the rod or "stirrer" was described as bent at the lower extremity, while the specification of the reissue declared, "it is obvious that the stirrer need not always be formed with a bent end." Held, that the reissue did not enlarge the original patent; the function of the rod as a "stirrer," clearly described in the original, is the same whether its end be bent or straight; the two

forms are but interchangeable equivalents.

In the original patent proceedings the applicant was required to surrender a claim describing the rod as "extending from a point outside the lamp through the tube into the carbide receptacle." *Held*, on the evidence, that this was not a surrender of the straight form of stirring rod.

In view of the facts of the case, held, that one of the petitioners, which entered the field when the patent was unquestioned and after the patentee by his efforts had created an extensive market, acquired in equity no intervening rights against the patent as subsequently reissued.

228 Fed. Rep. 895, affirmed.

THE case is stated in the opinion.

Mr. James R. Offield, with whom Mr. Charles K. Offield was on the brief, for petitioners.

Mr. James Q. Rice for respondents.

Mr. Justice McKenna delivered the opinion of the court.

Suit for infringement of a patent embraced in letters patent No. 821,580 and a re-issue thereof, No. 13,542.

The suit was originally brought by Frederick E. Baldwin, patentee. John Simmons Company, licensee, having the exclusive right to manufacture and sell the patented device, subsequently intervened and became complainant.

The patents are for a lamp designed to generate and burn acetylene or similar gas "intended for use," to quote the description of the patents, "and adapted to use as a bieycle, automobile, yacht, or miner's lamp, or for any other analogous purpose, it being necessary only to change its form or dimensions to adapt it to any one of the purposes mentioned." Stress in this case, however, is put upon the use of the asserted invention as a miner's lamp, such use conspicuously displaying its commercial utility.

Answer was filed by the Justrite Manufacturing Company, which was made a party defendant to the suit as manufacturer of the asserted infringing lamp, and by stipulation its answer was considered the answer of the Abercrombie & Fitch Company. It denied invention with great detail, set up anticipating patents, denied its utility, attacked the validity of the re-issue on the ground that the 1st and 4th claims of the original patent were held invalid by the United States Circuit Court of Appeals for the Seventh Circuit, 199 Fed. Rep. 133, and for the further reason that the application for the re-issue was not made until seven years after the original letters patent were issued and rights had accrued in the meantime to defendants (petitioners here) and to others. Infringement was denied.

A decree was passed sustaining the validity of the original patent and of the re-issue, the originality of the invention and its utility and adjudging that defendants (petitioners) had infringed claim 4 of the re-issue, that plaintiffs recover the damages they had incurred by reason of the infringement and the profits defendants had received, an accounting being ordered for this purpose. A perpetual

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injunction was also adjudged against further infringements. 227 Fed. Rep. 455. The decree was affirmed in all respects by the Circuit Court of Appeals, 228 Fed. Rep. 895, and subsequently this certiorari was granted.

The plaintiffs (we shall so designate respondents) struggled through some years and some litigation to the success of the decrees in the pending case. brought in the District Court for the Southern District of Illinois a device like that of the defendants herein was held to be an infringement of certain claims of the original patent. The holding was reversed by the Circuit Court of Appeals for the Seventh Circuit. Bleser v. Baldwin, 199

Fed. Rep. 133.

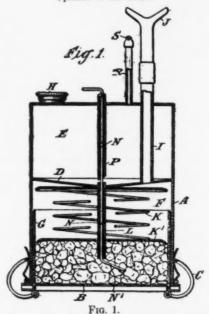
Subsequently, the re-issue having been granted, suit was brought in the Western District of Pennsylvania against an asserted infringer. Unfair competition was also alleged, and, holding the latter to exist, the court granted a preliminary injunction. 210 Fed. Rep. 560. Upon final hearing that holding was repeated, and infringement of a claim of the re-issue patent decreed. 215 Fed. Rep. 735. The decree was reversed by the Circuit Court of Appeals (Third Circuit) on the ground that the claim of the re-issue patent found to have been infringed was broader than a corresponding claim of the original letters patent and therefore void. The holding of the District Court as to unfair competition was sustained. 219 Fed. Rep. 735. Aided by the reasoning in the opinions of those cases and the discussion of counsel. we pass to the consideration of the propositions in controversy.

First, as to the original patent. Its contribution to the world's instrumentalities was, as we have said, an acetylene lamp and was represented by the following figure,

designated as Figure 1.

It will be observed that the device consists of a receptacle divided into two compartments, an upper one for Opinion of the Court.

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water and a lower one designed to serve as a gas-generating chamber, adapted to contain a receptacle for calcium carbide, which is attached to and forms the detachable bottom. There are means of introducing water into the reservoir and thence to the carbide and means of conducting the gas to the burner.

The device is a means of using the gas (acetylene) formed by the decomposition of water with calcium carbide and necessarily must bring them into contact in an effectual way and use the gas generated in a controlled flow. A tube (L) hence leads from the water reservoir into the carbide receptacle and forms a duct which introduces the water into the body of the carbide. Various means, the specifications recite, have been employed to regulate or control the flow of water to the carbide, which were found objectionable or not adequate.

The patentee then says that the method which he has invented "for securing the proper feed under all circumstances" without "objectionable features is to make the bore of the duct of comparatively large size and then restrict it by means of a wire or rod preferably centrally located therein to leave a channel of the proper size."

It is then said: "This arrangement is simple; but in a long experience it has been found to be entirely successful. It is possible to secure the correct drop-by-drop feed with a duct of considerable size, since the friction of the water on the large area of the tube-wall and wire reduces its flow. This retarding friction may be regulated by varying the size of wire used. The duct does not become choked, since if foreign particles are deposited therein the water can take a zigzag course around it without the supply being appreciably affected. If it is at any time necessary to clean the tube, the wire is simply reciprocated and rotated a few times from the outside of the lamp without disturbing the position of other parts. This nice regulation of the flow enables me to entirely dispense with the troublesome adjustment of the valve. In some cases, however, there is employed in connection with the means for introducing the water into the mass of carbid a device in the nature of a stirrer, which on proper manipulation may be used to break up the mass of carbid surrounding the outlet of the water duct and which by having become slaked and caked by the action of water prevents the proper percolation of the latter to the unslaked carbid in the receptacle G, Fig. 1. As such device I employ a stem or rod N, which extends down through the tube L and is bent at substantially right angles to form an arm N'."

There is also a figure attached to the patent which shows a valve upon the constricting rod and it is said "this rod may form a prolongation of the valve stem . . . or in case no valve is used may extend from the top of the

lamp down through the water-reservoir," and this is illustrated by figures.

"As calcium carbid possesses strongly absorptive properties, the introduction of water through the tube L will result in the gradual slaking of the material about its outlet; but the lime thus produced becomes gradually less permeable to the water, so that an insufficient quantity of gas is generated to maintain the proper flame. When this becomes noticeable, the rod N is turned, so as to cause the arm N' to break up to a greater or less extent the mass of lime, and in practice I have found that under ordinary conditions this is amply sufficient to insure a substantially uniform generation of gas until all of the carbid in the receptacle G is exhausted."

There are some further descriptive details not necessary to be repeated, and this was said: "The specific construction of the various parts of my lamp may be, as will be seen from a consideration of the nature of the improvements, very greatly varied without departing from the invention."

The claims of the patent which are pertinent to our inquiry are as follows:

"1. In a lamp of the kind described, the combination with a water-reservoir, and a receptacle for calcium carbid, of a tube extending from the former a considerable distance into the latter so as to be embedded in the mass of carbid contained in said receptacle, and a rod or stem extending through said tube into the carbid-receptacle and having its end formed as a stirrer to break up the slaked carbid around the outlet of the water-tube, as set forth.

"2. In a lamp of the kind described, the combination with a water-reservoir, and a receptacle for calcium carbid, of a tube extending from the former into the latter so as to be embedded in the mass of carbid contained in the receptacle, a rod extending from a point outside of the

lamp through the tube and into the carbid-chamber and having its end bent to form a stirrer for breaking up the slaked carbid around the outlet of the water-tube, as set forth.

"4. In a lamp of the kind described, the combination with a water-reservoir, and a receptacle for calcium carbid, of a water-tube extending from the former a considerable distance into the latter and adapted to be embedded in the mass of carbid in the receptacle, and a rod extending through the water-tube, and constituting a stirrer to break up slaked carbid around the outlet of the water-tube, the rod operating to restrict and thus control the flow of water to the carbid, as set forth."

The words in italics are the addition of the re-issue.

Whether the lamp exhibits invention, when both patents are considered, we shall discuss later. Our attention is more immediately challenged by the stress put upon other defenses, especially upon the contention that the patent is confined to a special form and, so confined, is not infringed; and that the extension of the patent by the reissue is void. The controversy is, therefore, brought to a consideration of the original patent as added to or developed by the re-issue. And their comparison centers in the water-feeding duct or tube and its restriction by means of a wire or rod and the shape and use of the rod to pierce or stir the carbide. In the original patent, as we have seen, it was said that the invented method for securing a proper feed (flow of the water to the carbide) without certain specific objectionable features was "to make the bore of the duct of comparatively large size and then restrict it by means of a wire or rod preferably centrally located therein to leave a channel of the proper size." In the re-issue, after the words "comparatively large size," it was added-"extend the tube which forms the duct downward so that its end will be always embedded in the carbid." In other words, the tube is explicitly described as extending to and its end embedded in the carbide, and this, it is contended, was an enlargement of the original patent.

The contention is untenable if there was in the original patent an implication of such length and termination of the tube, and we think there was. To conduct water to the carbide it necessarily had to extend to the carbide receptacle and as necessarily had to penetrate the carbide if the rod located in it, whether straight or bent, was to act "in the nature of a stirrer, which on proper manipulation" might "be used to break up the mass of carbid surrounding the outlet of the water duct," which is the purpose that the patent ascribes to it. And Fig. 1 shows such ending and embedding. It would be impossible otherwise to perform its function or secure the "proper percolation" of the water "to the unslaked carbid in the receptacle G, Fig. 1."

But there was another addition in the re-issue which, it is contended, enlarges the invention and assigns a new shape and function to the stirrer of the original. In the latter the rod is described as extending "from the top of the lamp down through the water-reservoir, as shown in Fig. 3." To this the re-issue adds:

"It will be understood from what has been said that the function of the stirrer is to break up, pierce or disturb the particles of the slaked carbid mass which, when the lamp is in use, forms at the delivery end of the tube. This slaked carbid mass tends to solidify and either shuts the water off altogether or restricts it so that less water is delivered from the water tube than the lamp demands for efficient operation. As it is sufficient, under certain circumstances, to insure the requisite water flow by so manipulating the stirrer, as to pierce, break up, or loosen the slaked carbid mass immediately around or at the mouth of the tube, it is obvious that the stirrer need not

always be formed with a bent end or so as to extend radially from the mouth of the tube."

There is nothing in this but what was clearly implied in the original, except the shape of the stirrer. In the original it is described and represented as bent. In the re-issue it is stated to be obvious that the stirrer need not always be bent "or extend radially from the mouth of the tube."

We are unable to assign to this the extent of alteration that counsel do, nor do we think it necessary to rehearse the details of their argument. We have given it attention and the cases it cites, especially the decision and reasoning of the Circuit Court of Appeals for the Third Circuit in Grier Bros. Co. v. Baldwin, 219 Fed. Rep. 735, but we are constrained to a different conclusion. Indeed, we are of opinion that the original patent did not need the exposition of the re-issue. It exhibited an invention of merit, certainly one entitled to invoke the doctrine of equivalents. Paper Bag Patent Case, 210 U. S. 405. Baldwin, the patentee, complied with the statute (§ 4888, Rev. Stats.) by explaining the principle of his invention and the mode of putting it to practical use; there was a clear exposition of the principle and the instruments of its use were defined and their purpose and manner of operation. It left nothing in either for further experiment or contrivance. As we have said, the invention was a means of using the gas formed by the decomposition of water with calcium carbide, and necessarily the water and carbide must be brought into contact and under a controlled flow; hence the tube and its centrally located rod extending downward to the carbide. It was foreseen and stated that the carbide might become torpid or slaked by the action of the water and might have to be disturbed or dispersed in order that there might be percolation of water to unslaked carbide, and this was provided to be performed by a simple manipulation of the rod. Whether the rod was bent or made straight was unimportant. In either form it removed the slake and secured the continuous operation of the water and carbide and through them the formation of the gas and its illuminating purpose. One or the other might be better, according to the extent of the dispersion required, and one naturally suggested the other.

It is, however, contended that plaintiffs were required to give up and did give up in the Patent Office a claim which had the extent which we have indicated. A claim, numbered in the application as 6, described the rod as: "A rod extending from a point outside the lamp through the tube into the carbide receptacle."

Counsel say, "It is to be particularly noted" that while other claims "mentioned the stirring function of the rod, claim 6 omitted this feature," but that the solicitor who drew the claim "unquestionably had in mind the straight form of rod construction without any stirrer at the end. for the claim specifies 'through the tube into the carbide receptacle." It is hence argued that when the claim was given up the straight form of construction was given up. and, having been given up to secure the patent, it cannot be insisted upon to prevent its use by others. But counsel is in error as to the extent of the surrender. The straight construction was not given up, but such construction through the tube into the carbide receptacle, and this was in deference, and only in deference, to other patents that showed such use, that is, showed a penetration into the receptacle but not its duct ending and embedded in the carbide.

We do not think the case calls for extended discussion. It is best considered in broad outline. The scope and merit of the patents are of instant and assured impression, and to the attempt to defeat or limit their invention by the state of the prior art we adduce the discussion and reasoning of the opinions of the lower courts, which we approve.

The denial of infringement is also easily disposed of. Indeed, it has been in effect disposed of. It is based on the contention that the stirrer is an essential of plaintiff's lamp and that a stirrer is absent from defendants' lamp, which is in all other particulars, as far as this case is concerned, similar to the plaintiff's lamp. To the contention of defendants, therefore, we cannot assent. There is a stirrer in both, and its form, as we have seen, is not of the essence of the invention. There is nothing occult in the act of stirring: it is causing movement or disturbance. and this may be performed by a straight rod as by a bent There may be difference in their dispersing power, but no difference in function, and one or the other would be instantly selected according to the need, under the clear description of the patent. This ready adaptation of the form of stirrer to the work to be performed Baldwin demonstrated even before the grant of the patent. Early in 1906 he put upon the market a lamp with a straight rod. "which, among other things," as the District Court has said, "has characterized the commercial lamp ever since."

To the contention that the Justrite Company, the manufacturing defendant, acquired rights before the re-issue we again may oppose the reasoning and conclusion of District Judge Mayer and their affirmance by the Circuit Court of Appeals. The learned judge said: "It will be remembered that this company entered the field with its lamp at a time when the validity and scope of the Baldwin patent were still unquestioned and when after some five years of capable effort, the Baldwin lamp had created an extensive market. The Justrite Company took its chances and, in view of the necessities of the situation, it is relieved of all accountability for the period prior to the granting of the reissue patent; but when the reissue was granted the Justrite Company again took its chances.

"By the reissuance of the patent, the patentee loses all in the way of an accounting under the original patent, Argument for Plaintiff in Error.

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but the dominant purpose of the reissue statute was to save to the inventor the future remaining after the reissue.

"I see nothing in the course of plaintiffs or defendants which would allow a court of equity to conclude that defendants are to be relieved because of intervening rights."

Decree affirmed.